AMENDMENTS TO THE CLAIMS:

Claims 1-5, 7-9, 11-18, 20-22, 24-33, and 35-47 were pending at the time of the Final Office Action.

Claims 1, 3, 12, and 14 are hereby amended, and claims 5, 13, 17-18, 24-37, and 43-47 are cancelled.

Claims 1-4, 7-9, 11-12, 14-16, 20-22, and 38-42 remain pending.

1. (Currently Amended) An apparatus for supporting a tool relative to a surface of a workpiece, the apparatus comprising:

a base;

a tool support coupled to the base and moveable along a translation axis relative to the base, the tool support being configured to be coupled to the tool, at least one of the base and the tool support being further configured to operatively position the tool relative to the workpiece for performing ~~a~~ the manufacturing operation on the workpiece; ~~and~~

a biasing device having a first portion operatively coupled to the base and a second portion coupled to the tool support, the first and second portions being moveably coupled and configured to apply a biasing force to the tool support to at least partially counterbalance a force exerted on the tool support along the translation axis by a weight of the tool coupled to the tool support, wherein the biasing device includes a pneumatic actuator; and

a control valve coupled to the pneumatic actuator, the control valve being configured to adjustably control at least one of a magnitude and a direction of a biasing force applied to the tool support by adjustably controlling a pressure within the pneumatic actuator.

2. (Previously Presented) The apparatus of Claim 1, wherein the biasing device is further configured to adjustably apply the biasing force, the apparatus further comprising a control

mechanism coupled to the biasing device, the control mechanism being configured to adjustably control a magnitude of the biasing force.

3. (Currently Amended) The apparatus of Claim 2 [[1]], wherein the control mechanism is further configured to control a direction of the biasing force.

4. (Previously Presented) The apparatus of Claim 1, wherein the tool support is moveable in a first direction along the translation axis, and in a second direction along the translation axis opposite to the first direction.

5. (Cancelled)

6. (Cancelled)

7. (Previously Presented) The apparatus of Claim 1, wherein the biasing device includes a motor, the motor being at least one of a constant torque motor and a non-constant torque motor.

8. (Previously Presented) The apparatus of Claim 1, wherein the biasing device is biasable along a biasing axis that is aligned with the translation axis.

9. (Previously Presented) The apparatus of Claim 1, wherein the biasing device is controllably biasable in a biasing direction along a biasing axis.

10. (Cancelled)

11. (Previously Presented) The apparatus of Claim 12, wherein the translation axis is at least partially transverse to the at least one elongated rail member.

12. (Currently Amended) An apparatus for supporting a tool relative to a surface of a workpiece, the apparatus comprising:

a base configured to be attached to the workpiece, wherein the base includes:

at least one elongated rail member;

a plurality of vacuum attachment devices connected to the at least one rail member and configured to be coupleable to the surface of the workpiece; and

a carriage assembly moveably coupled to the at least one rail member, wherein the carriage assembly includes a drive assembly having a drive motor operatively engaging the at least one rail member and configured to drive the carriage assembly along the at least one rail member along a movement axis;

a tool support coupled to the carriage assembly and moveable along a translation axis relative to the carriage assembly, the tool support being configured to be coupled to the tool; ~~and~~

a biasing device having a first portion operatively coupled to the base and a second portion coupled to the tool support, the first and second portions being moveably coupled and configured to apply a biasing force to the tool support to at least partially counterbalance a force exerted on the tool support along the translation axis by a weight of the tool coupled to the tool support, wherein the biasing device includes a pneumatic actuator; and

a control valve coupled to the pneumatic actuator, the control valve being configured to adjustably control at least one of a magnitude and a direction of a biasing force applied to the tool support by adjustably controlling a pressure within the pneumatic actuator.

13. (Cancelled)

14. (Currently Amended) An assembly for performing a manufacturing operation on a surface of a workpiece, the assembly comprising:

a base;

a tool support moveably coupled to the base and moveable along a translation axis relative to the base, at least one of the base and the tool support being configured to operatively position the tool relative to the workpiece for performing the manufacturing operation on the workpiece;

a manufacturing tool coupled to the tool support and configured to be engageable with the surface of the workpiece to perform the manufacturing operation on the surface of the workpiece; ~~and~~

a biasing device having a first portion coupled to the base and a second portion coupled to the tool support, the first and second portions being moveably coupled and configured to apply a biasing force to the tool support to at least partially counterbalance a force exerted on the tool support along the translation axis by a weight of the manufacturing tool, wherein the biasing device includes a pneumatic actuator; and

a control valve coupled to the pneumatic actuator, the control valve being configured to adjustably control at least one of a magnitude and a direction of a biasing force applied to the tool support by adjustably controlling a pressure within the pneumatic actuator.

15. (Previously Presented) The assembly of Claim 14, wherein the biasing device is further configured to adjustably apply the biasing force, the assembly further comprising a control mechanism coupled to the biasing device, the control mechanism being configured to adjustably control a magnitude of the biasing force.

16. (Previously Presented) The apparatus of Claim 15, wherein the control mechanism is further configured to control a direction of the biasing force.

17. (Cancelled)

18. (Cancelled)

19. (Cancelled)

20. (Previously Presented) The apparatus of Claim 14, wherein the biasing device includes a motor, the motor being at least one of a constant torque motor and a non-constant torque motor.

21. (Previously Presented) The apparatus of Claim 14, wherein the biasing device is biasable along a biasing axis that is aligned with the translation axis.

22. (Previously Presented) The apparatus of Claim 14, wherein the biasing device is controllably biasable in a biasing direction along a biasing axis.

23. (Cancelled)

Claims 24 through 37. (Cancelled)

38. (Original) A method of performing a manufacturing operation on a surface of a workpiece, the method comprising:

detachably securing a support member to the surface of the workpiece;

moveably attaching a manufacturing tool to the support member, the manufacturing tool being moveable relative to the support member along a translation direction over the surface of the workpiece;

securely engaging the manufacturing tool with the surface of the workpiece; and

with the manufacturing tool securely engaged with the surface of the workpiece, detaching the support member from the surface of the workpiece; and

with the manufacturing tool securely engaged with the surface of the workpiece, moving the support member relative to the manufacturing tool.

39. (Original) The method of Claim 38, wherein detachably securing a support member to the surface of the workpiece includes detachably securing a pair of elongated rail members to the surface of the workpiece.

40. (Original) The method of Claim 38, wherein detachably securing a support member to the surface of the workpiece includes providing a vacuum to a vacuum assembly to detachably secure the support member to the surface of the workpiece.

41. (Original) The method of Claim 38, wherein moving the support member relative to the manufacturing tool includes moving the support member along an x-axis relative to the manufacturing tool, the x-axis being approximately perpendicular with the translation direction.

42. (Original) The method of claim 38, wherein moving the support member relative to the manufacturing tool includes moving the support member along an x-axis relative to the manufacturing tool, the x-axis being approximately perpendicular with the translation direction and with a local normal to the surface of the workpiece.

Claims 43 through 47. (Cancelled)